

AN EVALUATION OF AUDIENCE RESPONSE TO MEDIA CAMPAIGNS ON EBOLA VIRUS DISEASE PREVENTION AND CONTROL IN SOUTH-SOUTH NIGERIA

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ABSTRACT

Over the years, the process of health behavioural change or development is hardly successful without communication. This is so because any real social development and behavioural change involves the participation of people in the society and they participate mainly through communication. The 2014 Ebola Virus Disease (EVD) outbreak evolved in alarming ways, with the affected countries, Guinea, Liberia, Sierra Leone, and Nigeria struggling to control the escalating outbreak. The EVD outbreak led to various launching of media campaigns towards the prevention and control of the disease by various organisations in the country. However, the EVD disease was successfully contained in the country but audience responses to those preventive and control messages of the campaign and the possible success or failure of the campaigns are yet undetermined. This study evaluates audience response to media campaigns on Ebola Virus Disease prevention and control in South-South Nigeria. The survey research method was used and Australian National Statistical Service (NSS) Online Calculator was used to draw a sample size of 385 from the population to ascertain: awareness, exposure, perception and extent to which the audience responded to the media campaign messages on EVD. The findings revealed that majority of the respondents (95.7%) were exposed to the campaigns, also their knowledge about the disease was increased through the campaigns. A greater percentage of the respondents agreed that to a large extent the campaign was successful. The findings also revealed that a greater percentage of the audience (92.6%) responded to the campaigns and majority among them always observe the control measures contained in the campaign. The study therefore emphasized the need for adoption of mixed media strategy in disseminating health campaigns such that one medium will complement the lapses of the others

KEYWORDS: Audience Response, Media Campaigns, Ebola Virus Disease

INTRODUCTION

The process of health behavioural change or development is hardly successful without communication; this is so because communication is an indispensable vehicle for social change and development (Mbaka 2013 p.119). Thus, communication plays a central role in our lives. Ndolo (2005 p.13) posits that communication as a tool for information exchange enables us learn about our environment and the changes in the society and how to adopt means of averting any danger from such new development. He further stated that communication changes attitudes and behaviours and the primary purpose of all communication efforts is to influence behaviour of others Ndolo (2005 p.15).

One of the functions of mass media which Laswell, Wright and McQuail stated (as cited in Ndolo 2005 p.21) is surveillance. This function means that the media provide information about local, national and international events and conditions. One of such conditions is the current Ebola Virus Disease outbreak in West Africa. He further stated that, the media facilitate innovations, adaptation and progress in the society through campaigns, programmes etc. In line with this,

Daramola (2003 p.22) adds the mobilization function by which the media persuade the members of the society toward a common developmental goal.

The Ebola Virus Disease outbreak in West Africa constituted a major public health issue globally, with over 8,399 cases reported, resulting in over 4,033 deaths and a case fatality rate up to 90% in humans, making the outbreak the deadliest since it was discovered (WHO & BBC-news, 2014). This recent report from the World Health Organization (WHO) led to an urgent action against the EVD scourge. According to CDC's report, cases could hit 1.4 million persons in Liberia, 21,000 persons in other infected African countries by 2015; if efforts to curb the outbreak (the largest in history) are not ramped up (www.cdc.gov/mmwr.com).

In Nigeria, Mr. Patrick Sawyer arrival at the Lagos airport on July 20, 2014 marked the first case of Ebola virus disease in the country. According to Fasina et al (2014), that confirmation raised a concern by public health workers to monitor and, where necessary, isolate scores of flight attendants, passengers, airport workers and hospital staff who may have had contact with Mr. Sawyer, who later died on July 25. In all, 353 contacts were monitored in Lagos and 451 in Port Harcourt (www.health.gov.ng.com). There were 20 confirmed cases of EVD in Nigeria with 8 deaths. The WHO's representative in Nigeria officially declared Nigeria Ebola-free on 20th October 2014, after no new cases were reported in the follow-up contacts

Given the data on the EVD in Nigeria, there is an urgent need to create large scale media campaigns to raise awareness and increase prevention and control of the disease, as Okorie (2014, p.2) posits that campaigns are designed to increase public knowledge, change behaviour and attitudes on issues such as HIV/AIDS, drug abuse, Breast cancer etc. In view of the fight against the EVD outbreak, media campaigns were embarked on by different bodies such as the National Association of Science Journalists (NASJ), National Centre for Disease Control (NCDC), Dettol Spearheads Enlightenment Campaign, Department of Public Health and Human Services (PHHS). The preventive measures in the campaigns represent efforts by organizations and other global initiatives to achieve interventions using media campaigns. This study therefore evaluates audience response to these media campaign on EVD in South-South Nigeria.

Statement of the Problem

After many months of information on Ebola Virus Disease, there were misconceptions by the audience on what the virus is and what is not. This is evident in the misconception that the disease is airborne while some were ignorant of the modes of its transmission. The confusion arising thereof resulted to the chaos on 8th of August 2014 when the salt water bathing and drinking hysteria spread across all parts of the country as a preventive measure against EVD.

Is'haq Modibbo Kawu, a reporter in Vanguard newspaper (Online Version) in a report titled 'Ebola Virus and the Salt Water of Ignorance' reported that;

A Medical Doctor who is a very senior officer with one of the key FGN agencies involved in managing this crisis confirmed... that he also bathed in salt! Can you imagine the implication of this...?...This has brought to the fore how vulnerable our people are to narratives that could harm them! Any wonder then that our Muslim and Christian clerics have such awesome power to mislead once they go toxic?" (*Vanguard*, August 14, 2014).

The health authorities in Nigeria confirmed that it led to the deaths of some Nigerians while others were hospitalized. Dr. Joseph Kumba, Director, Public Health in the Ministry of Health and Human Services announced this on 13th August 2014. (Daily Post, Online Version 14th August). Beyond lack of information, there is also the problem of

denial. To accelerate actions on EVD in West Africa, local health officials launched campaigns to educate people on what they need to know about the disease.

Research evidence has since demonstrated that the mass media have long been used in the promotion of good health practices and the prevention of various social and health problems (Ikpeze, 2007 P.6). In all its diversity, the mass media have been identified as constituting a primary source of information through which people learn about the world around them (Daramola, 2003 p. 22). The Ebola Virus Disease has been contained in Nigeria, but audience responses to those preventive and control messages of the virus and the possible success or failure of those messages are yet undetermined. This study, seeks to find out the link between the Ebola Disease campaign messages and the audience responses towards prevention and control of the disease.

Objectives of the Study

In specific terms, this study's objectives are stated as follows:

- To examine the level of audience exposure to the media campaigns on Ebola virus disease (EVD) in South-South.
- To determine audience awareness level of media campaigns on Ebola virus disease in South-South.
- To examine audience perception of the media campaigns on EVD in South-South.
- To determine the extent to which the campaigns have influenced the audience on awareness and control of the disease in South-South.

Research Questions

To meet the above objectives, the following research questions will guide the study:

- What is the level of exposure to the media campaigns on Ebola virus disease in South-South?
- What is the awareness level of media campaigns on Ebola virus disease in among audience in South-South?
- What is the audience perception of the media campaign on Ebola virus disease in South-South?
- To what extent did the audience respond to the campaigns on EVD prevention and control in South-South?

Literature Review

Ebola Haemorrhagic Fever (EHF) is named after a river in northern Zaire (now Congo) where it was first discovered in 1976 in two simultaneous outbreaks in Nzara, Sudan and Yambuku, Democratic Republic of Congo. EVD outbreak has occurred thirty-four (34) times since its discovery (WHO, 2010); the later occurred in a village near the Ebola River from which the disease takes its name. It was discovered by Peter Piot, a 27-year-old scientist and medical school graduate training as a clinical microbiologist (CDC 2010 p.1). Ebola Haemorrhagic fever is one of the viral haemorrhagic fevers (VHFs), that is caused by an Ebola virus which can lead to severe viral haemorrhagic fever outbreaks in humans with a case fatality of up to 90%. There are five species of the genus Ebolavirus (Filoviridae family): Zaïre ebolavirus (EBOV), Sudan ebolavirus (SUDV), Reston ebolavirus (RESTV), Taï Forest ebolavirus, TAFV and Bundibugyo ebolavirus, BDBV (ECDC, 2014 p. 8).

According to scholars, the reservoir of the virus is still unknown till date, however fruits bats of the Pteropodidae family are considered to be the natural hosts of the Ebola virus. It is transmitted to people from wild animals such as bats, baboons, monkeys, gorilla etc. (HHSS, 2014 p.2, WHO 2012, p.13). On the risk of transmission into Human population, Colebunders and Borchert, (2000) opined that Ebola viruses are transmitted into human population through close direct contact with infected blood, secretions, tissues, organs and other bodily fluids from dead or living infected persons. Moreso, according to CDC, the risk of transmission is considered low in the early phase of human disease, however burial ceremonies and the handling of dead bodies play an important role in transmission (CDC, 2013, p.3).

In a research conducted by Daniel et al (2014) on the assessment of the risk of Ebola virus transmission from body fluids and fomites in Uganda, it was discovered that EVD can be transmitted in a wide variety of body fluids during acute period of illness but the risk of transmission from fomites in an isolation ward is low when the recommended infection guidelines are followed. In a similar research conducted in Nigeria by Fasina et al on the transmission dynamics and control of Ebola virus disease outbreak in Nigeria July-September, 2014; an up-to-date epidemiological data of the Ebola virus disease outbreak in Nigeria were analysed, as of 1 October 2014 in order to estimate the case fatality rate, the proportion of healthcare workers infected and the transmission tree. Results indicate that the country was able to control the outbreak as a result of early detection of the index case in Nigeria. Also, the intense monitoring, follow-up of all those that possibly had contact with the index case and subsequent isolation of secondary cases contributed to the swift control of the outbreak in Nigeria. Ebola viruses are responsible for severe zoonotic disease known as hemorrhagic fever which affects human and non-human primates and humans seem to become infected directly from bats (African hemorrhagic fever, 2009). Although the mortality rate varies, however according to CDC (2014, para 4), the most pathogenic viruses kill up to 90% of those who become infected. However, It has being established by CDC and WHO that the most effective way to stop Ebola outbreak is meticulous work in finding Ebola cases, isolating and caring for those patients and tracing contacts to stop the chains of transmission (CDC, 2014 para.6).

The prevention of Ebola hemorrhagic fever in Africa presents many challenges, because the identity and location of the natural reservoir of Ebola virus is unknown, Abishek et al (2014,p.1) opined that treating patients infected with Ebola hemorrhagic fever essentially consists of intensive supportive care, which is directed towards maintenance of effective blood volume, fluids, sanitary burial and standard nursing care; although there are few established primary preventive measures. It is also believed that strict infection control measures and barrier nursing precautions must be used during treatment, to prevent infection of medical staff (African hemorrhagic fever, 2009; PHAC, 2012; WHO, 2014).

In Africa, exposure to the tissues of an infected animal during butchering is a major way of contracting and spreading of the virus (Nathaniel, Chidebelu, Enweani, Faro& Nwabueze, 2014 p.14). Most cases have been linked to exposure to chimpanzees, gorilla, or duiker carcasses. Therefore, Meat inspection and testing should be done to protect butchers and consumers. Surveillance for deaths and illness in wild animals, particularly non human primates, may provide an early warning to prevent human epidemics (CDC, 2014 p.3). And so, during outbreaks, suspects should be isolated and quarantined after confirmation of the disease (Abishek et al 2014 p.2).

Consequently, to prevent and control EVD disease, there is need for media campaigns to sensitise and educate the public on these ways the virus can be controlled and prevented. This is so because of the role media campaigns have played in time past in curbing similar outbreaks in the society. Melanie et al (2010, p.2) argued that the greatest promise of mass media campaigns lies in their ability to disseminate well defined behaviourally focused messages to large

audiences repeatedly, over time, in an incidental manner and at a low cost per head. Synder (2001) as cited in Thainiyom, P. (2001p. 4), discovered this in a research to determine effects of health campaigns on behavioural change using forty-eight health promotion campaigns and found that health campaigns can trigger a modest 7-10% effect on health behavioural change. Another research by Noar, Palmgreen, Chabot, Dobransky & Zimmerman (2009 p. 35), which includes a 10 year systematic review of thirty-four HIV/AIDs mass communication campaigns, further confirms that 80% of media campaigns with stronger outcome evaluation designs demonstrate positive effects in changing the target's behavioral intentions in using condoms, getting tested for HIV and reducing sexual patterns. Health Campaigns according to Thainiyom, P. (2001 p. 4) in the post- millennium have adopted better ways that lead to increased knowledge and behavioural change. As Grant and Kathryn, (2001 p.3) pointed out that health campaigns are becoming clear instruments to inform and persuade people to learn more about health issues such.

Education and awareness of Ebola virus disease can contribute in the favourable shift in control of the disease. This is so because when people are aware of the factors that cause the disease are within their control, all they need to know is what should be done at a given time and what should not be done. For instance, it has being emphasized by WHO, CDC and some other health agents that use of hand sanitizer and constant washing of hands are among the top preventive measure recommended during Ebola virus disease outbreak. (Gojo USA, 2014 para.1). However, in order to control and prevent being infected with the disease, they will increase the use of the sanitizer and frequently wash their hands. Although, this control will to some extent depend on their perception susceptibility to the disease and severity, benefits and barriers that can hinder positive behavior.

It is also important to educate health care providers, especially those who come in regular contact with patient of ebola virus disease on the use of protective clothing, such as masks, gloves, gowns, and goggles; the use of infection-control measures, including complete equipment sterilization. Evidence suggests that large outbreaks of EVD are usually driven by person-to-person transmission, with caregivers both at home and in hospitals being at particular risk (Khan, Tshioko, Heymann et al 1999 P.76).

THEORETICAL FRAMEWORK

Health Belief Model

The Health Belief Model (HBM) is the most commonly used theory in health education and health promotion (Glanz, Rimer & Lewis, 2002 p.52; National Cancer Institute [NCI], 2003). The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behaviors. This is done by focusing on the attitudes and beliefs of individuals. The HBM was first developed in the 1950s by social psychologists Hochbaum, Rosenstock and Kegels working in the U.S. Public Health Services. (Glanz, et al, 2002 p.51)

Core Assumptions of the Model

The HBM according to Glanz et al is based on the understanding that a person will take a health-related action (say use hand sanitizer) if that person:

- feels that a negative health condition (e.g ebola) can be avoided,
- has a positive expectation that by taking a recommended action, he/she will avoid a negative health condition (i.e., using hand sanitizer will be effective at preventing EVD), and

- believes that he/she can successfully take a recommended health action (i.e., he/she can use hand sanitizer comfortably and with confidence).

The health belief model holds sway in this study because people will respond best to the campaigns against Ebola virus disease when they perceive the risk of getting the virus and thus believe that the risk is serious and that the consequences of contracting the virus is undesirable. Having considered that the barriers to the behavioural change the campaigns advocates can be overcome, they will have a positive expectation by accepting the recommendations in the campaign to avoid contracting Ebola virus disease.

METHODOLOGY

The research design for this study is the survey method. A survey is a study of the characteristics of a sample through questioning that enables a researcher to make generalizations concerning the population of interest (Ohaja, 2003 p.11).

Population of the Study

The population of this study comprised audiene in the South-South region of Nigeria. This region was chosen because it was one of the regions cases of Ebola virus disease were recorded. Also, media presence in the region also contributed to its selection. According to the 2006 population census as projected for the year 2009, the region's population is estimated at 21, 385, 176 (Twenty one million, three hundred and eighty- five thousand, one hundred and seven six) from the National Population Commission/National Bureau of statistics (2010, p. 20).

Sample size

Giving that all members of the population might not be possible for the researcher to study because of time constraint, the respondents were selected using the simple random technique, this method is in line with the recommendations of Wimmer & Dominick (2011, p. 94) In all, the Sample Size Calculator as developed by the National Statistical Service of Australia (www.nss.gov.au/home.nsf/pages/sample+size+calculator, 2014), was used in determining the sample size for this study. After inputting the necessary figures, it generated 385 and this formed the sample size for the study.

Sampling Technique

In order to give everyone equal opportunity of being selected, (Uzoagulu, 1999 p.68) simple random technique was used to select three states (Rivers, Bayelsa and Delta) from whence the respondents were drawn.

The capitals of these states (Port-Harcourt, Yenegoa and Asaba) were purposely selected as the area where the questionnaires were administered. The capitals of these states were chosen because of the presence of media (radio, TV and newspapers). In addition, the residents have access to the media more, as they form part of the urban dwellers in the states. And this supported the findings of studies that revealed that the urban dwellers have more access to the media in Nigeria than others and thus the popular media of mass information,(radio, TV and newspaper) is urban-oriented (www.uniilorin.edu.ng& Ifukor, 2013).

Data Presentation and Analysis and Results

To elicit information from the respondents, 385 copies of the questionnaire were distributed to the selected states capitals and 350 copies were recovered. The analysis was based on the 350 copies of the questionnaire that were gotten. In the study, the respondents' demographic characteristics were classified into sex, age, and educational qualification. On the gender distribution, the majority of the respondents (55.7%) were female and the percentage of the male category was 44.3%.

On the age distribution of the respondents, it ranged from 15 to 55 years and above, having the five different groups of all the age intervals. Most of the respondents (51.1%) fell within the age bracket of 15-24 years, followed by 33.7% for the 25-34 years age bracket. The age bracket for 35-44 recorded 10.3%, while the category of 45-54 recorded 4.6%. The least age bracket 0.6% was 55 years and above.

Concerning the educational qualification of the respondents, majority was those with B.sc/HND 117(33.4%), this was followed by the respondents with OND/NCE 95(27.1%). The respondents with no formal education recorded 68 (19.4%), 65(18.6%) of the respondents had SSCE and the least was 5(1.4%) which comprise those with M.sc.

Research Question 1: What is the Level of Exposure to the Media Campaigns on Ebola Virus Disease in South-South Nigeria?

The result gathered revealed that a greater percentage 95.3% of the respondents said they have seen the campaigns in the media while 4.7% of the respondents said they were not exposed to the campaigns. Also, the study sought to find out the campaigns on EVD that the respondents were exposed to; the data indicated that the majority of the respondents 117 (33.4%) were exposed to the campaign by the Department of Public Health and Human Services(PHHS), 100 (28.6%) were exposed to the campaign by the National Centre for Disease Control, 93 (26.6%) responded that they saw the Dettol Spearheads Enlightenment Campaign. Those that saw the campaign by the National Association of Science Journalists recorded 22 (6.3%), while those that saw the campaign by the Federal Ministry of Health were 14 (4%). On the open ended segment of the questionnaire, those that saw other campaigns, said they saw the ones on posters and other outdoor campaigns were 26 (7.4%) .

Further more, the data gotten also indicated that a greater percentage of the respondents 175 (50%) always see these campaigns in the media; 137 (39.1%) respondents said they see it sometimes while a little number, 38 (10.9%) of the respondents said they see it rarely. This revealed that the media gave adequate coverage of the campaigns on EVD with the aim of preventing and controlling the disease in the country. The high level of exposure to the Ebola media campaigns is found in the accessibility of the media by the respondents, the findings revealed that almost all the respondents had access to the media (radio, television and newspaper). This supported the findings of Ifukor, (2013), that the mass media is an urban phenomenon and has very high access by the urban dwellers. Findings in the study in providing answers to research question one indicated that there was high exposure to the EVD media campaigns, which was as a result of so many strategies employed by the sponsors of the campaigns; however, it was revealed that the mass media strategy (Radio, TV and Newspaper) reached all segments of the audience as every age group in the demographic characteristics of the study saw the campaigns through them and this collaborated with the findings of Mbaka (2013, p. 136) that using all media of communication (mixed) ensures that all segment of the audience is reached and at a cheaper rate too.

Research Question 2: What is the Awareness Level of Media Campaigns on Ebola Virus Disease in Among Audience in South-South?

To determine this, the researcher used the following parameter: if the audience were aware of EVD campaigns, the medium they gained knowledge of the campaigns and their views on the aim of the campaigns. A great percentage (95.7%) of the respondents were aware of the campaign against (4.3%) who were not aware of the EVD campaigns in the media; this implies that there was high level of awareness of the EVD campaigns. The findings supported the findings of Omerigwe (2012) that awareness to a campaign does not guarantee exposure to the messages. From the findings, those that were actually exposed to the EVD campaigns decreased (94.3%) though with a very little margin, that is to support the findings of Maduekwe (2005 p.353) that “the medium is the message”. According to him: if some coconut fell in some distant forest, very far from any human habitation and no one heard it, was a sound made?

From the findings it can be inferred that the electronic media (TV and radio) created more awareness on EVD campaigns than the other media (newspaper and billboard), this was in consensus with Okenwa (2000 p.23) that through the electronic media, people's awareness can be raised through provision of relevant information from within and outside the society. Further questions to answer the second research question earlier stated revealed that majority (314, 89.7%) of the audience understood the messages in the campaigns against 36 respondents who did not understand the aims of the campaign. A greater percentage of the respondents agreed that the aim of the campaigns was to sensitize the masses, 116 (33.1%) said is for eradication and control while 32 respondents did not know the aim of the campaigns. This further implied that the awareness level was high since the audience were not just aware of the campaigns but also are knowledgeable on the aim of the campaigns, this however supported the findings of Healthy People (2010, p.3) that campaigns help to raise awareness of health risks and solutions, provide the motivation and skills needed to reduce these risks.

Research Question 3 :What is the Audience Perception of the Media Campaigns on Ebola Virus Disease in South-South?

It can be deduced from the results that the campaigns to very high extent was successful as many of the respondents (332, 94.9%) agreed that the campaigns were able to achieve its aims and objectives. The respondents were also asked to indicate how they see the campaign, just few of the respondents saw it as a waste of time and over abundance of content in the media. A greater percentage of the respondents affirmed that the campaigns are opportunity to get a summary of what the ebola virus is all about. This findings therefore supported the findings of Khan et al (1999,p.75) that important aspect of campaigns on Ebola virus is dissemination of information on what the virus is all about; this however from the perception of the audience is what these campaigns have achieved. The researcher also went further to inquire from those that said that the campaigns were unable to achieve its aims, to point out what they think that contributed to it.

The greatest promise of media campaign lies in their ability to disseminate well defined behaviourally focused messages (Melaine et al 2010, p.2) as indicated from the findings in this study, this promise to a very low extent was not realised, from these campaigns. The findings also revealed that from the 18 respondents that had unfavourable disposition about the campaigns, 7 respondents said that the campaigns lacked extensive consultations, 6 were of the opinion that the campaigns were not properly localised while 5 said the ideas lacked implementation at the grass-roots. The findings agreed to the findings of Melaine et al (2010, p.2) that campaigns can fall short as a result of using inappropriate or poorly researched format.

Research Question 4: to What Extent Did The Audience Respond to The Campaigns on EVD Prevention and Control?

In determining the extent to which the audience responded to the campaign messages on infection-control and prevention measures contained in the campaigns, the researcher used the following parameters: being able to observe the control and preventive measures and the frequency of such observation, the control measure they observe regularly.

From the data generated, a greater percentage of the respondents (90.9%) responded to the campaign messages, further inquiry revealed that most of the respondents (199, 56.9%) said they observe it always while 18 respondents said they rarely respond to it. The findings revealed that the audience responded positively towards the infection-control measures in the campaigns to prevent its spread across the country. Concerning the control measure, the respondents observe most frequently, the findings revealed that people responded to the use of hand sanitizer (306, 87.5%) and washing of hands (97, 27%) mostly than others. However, this supported the emphasis made by WHO, CDC and other health agents that the use of hand sanitizer and constant washing of hands are among the top preventive and control measures recommended during Ebola Virus Disease outbreak (Gojo, USA 2014).

Moreover, the findings also revealed that 12 respondents said they did not observe the preventive measures in the campaigns. From the qualitative data generated on why they did not observe to any, it was revealed that their belief and perception about the disease informed their non-compliance to the measures. Some believed it is a spiritual attack and so with their anointing oil, they are protected from the virus, while yet others said they can not contract the disease because of their God is able to protect them from the 'Egyptian sickness' (that is EVD). The findings here, supported the claims of Health Belief Model that a person's opinion of the risk of getting a health condition is determined by his or her knowledge about the risk. This means that the greater they perceive the risk, the greater the likelihood of engaging in behaviours to decrease the risk. Based on this, an individual who did not perceive the risk of contracting EVD, will not be keen to respond to the campaign messages about these control measures. Global Alert and Response of the World Health Organisation, has identified the use of media campaigns as one of the keys of controlling and containing EVD spread in a country. The findings in the study collaborated with this statement, the data also indicated that a greater percentage of the respondents representing (92.6%) said the campaigns contributed to the successful containment of the disease in the country as many believed that the contribution was to a very high extent.

Summary of Findings

Having discussed the findings from this study with other findings from related studies as they address each research question, the researcher therefore summarizes the findings arising from this study as follows:

- Most of the respondents have access to the media hence; the high level of their exposure to the campaigns on EVD in the media. Moreover, the use of mixed media strategy (radio, TV and newspaper) by the sponsors of these campaigns may have informed the reason of such high exposure.
- Most of the respondents are aware of the campaigns in the media, and majority gained knowledge of the campaign through television. The fact that majority of the respondents were students may have informed why few of the respondents said they gained knowledge of the campaign through newspaper. Posters and other outdoor campaigns achieved little in creating awareness, this shows the power of mass media in reaching heterogeneous audience within a short time.

- The campaigns on EVD in the media had favourable rating by the respondents. Many of the respondents saw it as an opportunity to present a summary of what ebola is all about, in order to promote adjustment of behaviours on prevention and control of the disease. Also, to most of the respondents the campaign was able to achieve its goals and objectives.
- The constant use of hand sanitizer and washing of hands by most of the respondents, indicate that the audience responded positively to the control measures in the campaigns and to a very high extent. Those that did not observe the control measures were influenced by their religious belief.

Conclusion and Recommendations

This study evaluates audience response to media campaigns on Ebola Virus Disease prevention and control in South- South Nigeria. In conducting this study the survey method was used to generate both quantitative and qualitative data. In view of the findings in this study, the researcher draws the following conclusions:

- That accessibility to the mass media by the audience guarantees success and effectiveness of media campaigns in achieving its goals and objectives.
- That the use of multiple channels to reach a wide and diverse audience makes development communication very effective.
- That repeated exposure to media campaigns increases knowledge about the issue and results to behavioural change towards the issue.
- That for any development communication to be effective, the persuader must find out the needs and aspirations of individuals in his audience and create relevant messages that appeal to these needs.

From the findings of this study; it is obvious that the use of electronic media ensures wider reach and coverage and since the popular media of mass information is urban oriented; efforts should be made by the government to ensure that the electric power supply in the urban areas is improved, to enable the urban dwellers to benefit from such development communication that will be disseminated through the electronic media.

Also, the findings from this study revealed that the campaign on EVD in the media was a collective responsibility undertaken by the government and private organisation. This study calls on the private organisation to also embrace efforts to eradicate such disease outbreak in the country, because this will contribute to the successful containment of such disease.

Health campaigns should not be scanty in the media. The campaigns should be repeated as often as possible to ensure its success and effectiveness. Health campaigns on deadly diseases should not over emphasize only on one or few control measures when there are lot of measures the audience can observe to prevent the spread of the disease.

A comparative study between the infected geo-political zone or non- infected zone, should be carried out to investigate if the presence of the Ebola disease in a zone influences peoples' response to the campaign messages. Again researchers should investigate on Ebola Virus diseases and socio-cultural practices in Nigeria, its implication for EVD preventive communication campaigns

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